

September 21, 2008

United States Environmental Protection Agency
77 W. Jackson Boulevard, LR-8J
Chicago, Illinois 60604-3590

Attn: Duncan Campbell
Environmental Protection Specialist

Re: NCP Coatings
Niles, Michigan
MID 005 167 242



401 Lincoln Way West
Osceola, IN 46561
Phone: 574-674-0161
Fax: 574-674-2778

Dear Mr. Campbell:

As we had previously discussed, enclosed please find various illustrative photographs of the distillation system in Exhibit A and a copy of their air permit as issued by the Michigan Department of Environmental Quality in Exhibit B. The original Permit to Install No. 1003-89 was issued in 1989 and this 2001 letter transferred the Permit to Install to Application Permit to Install No. 285-00. Regarding the distillation system, the enclosed permit is virtually the same as it was when issued in 1989.

I took several photos of the system, but the enclosed ones seemed to be the most illustrative as to the pertinent questions of issue.

We trust this suffices as to the additional information required regarding our correspondence dated September 5, 2008. However, should you need any additional information, please don't hesitate to contact me.

Regards,


Robert C. Smith, REM #05765

cc: Willie H. Harris, Chief, RCRA Branch, EPA
John Craig, MDEQ, Main Office
Nadine Deak, MDEQ, Kalamazoo District
Sherman Drew, NCP Coatings
Mike Glasgow, NCP Coatings
Don Sabbe, D&B Environmental Services, Inc.

enclosures



M. Sherman Drew Jr.
Executive Vice-President/Director

NCP Coatings Inc.
225 Fort Street, Niles, Michigan 49120-0307
P: 800.627.1948 Ext. 268 C: 269.930.0703
F: 269.683.3305 E: sherman@ncpcoatings.com
www.ncpcoatings.com
ISO 9001 CERTIFIED

Cell -
574 220-5603

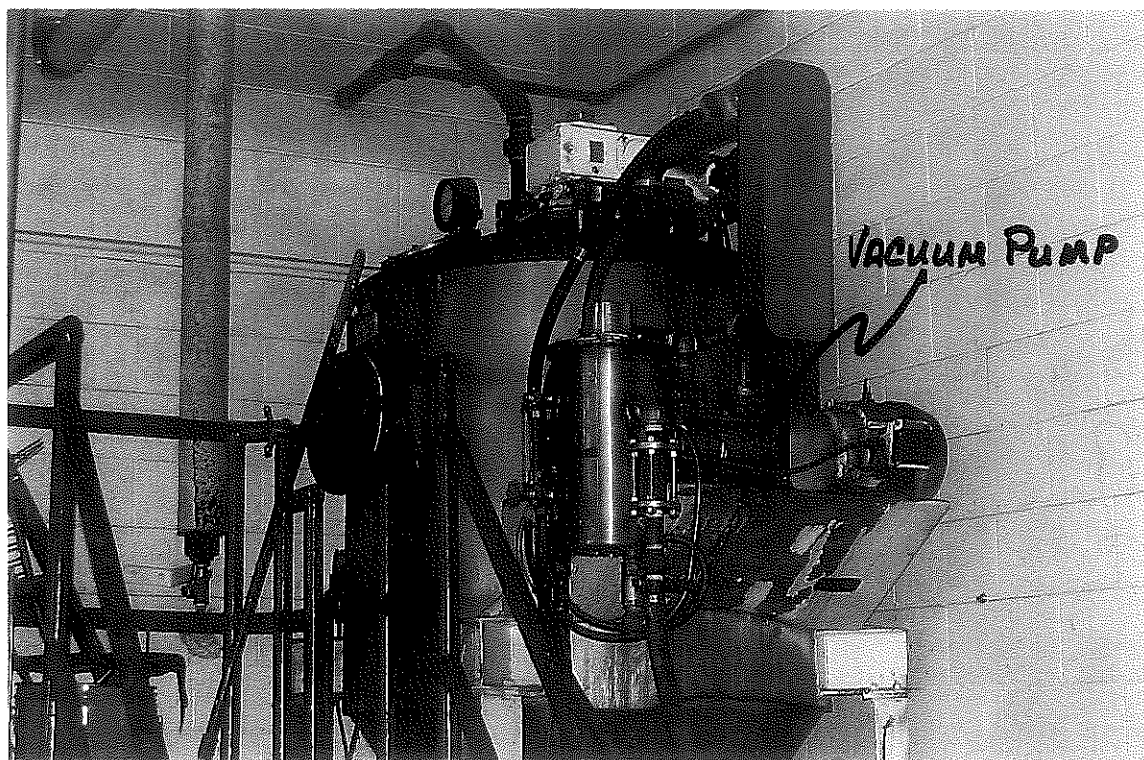
Bob Smith, R.E.M.
Registered Environmental Manager



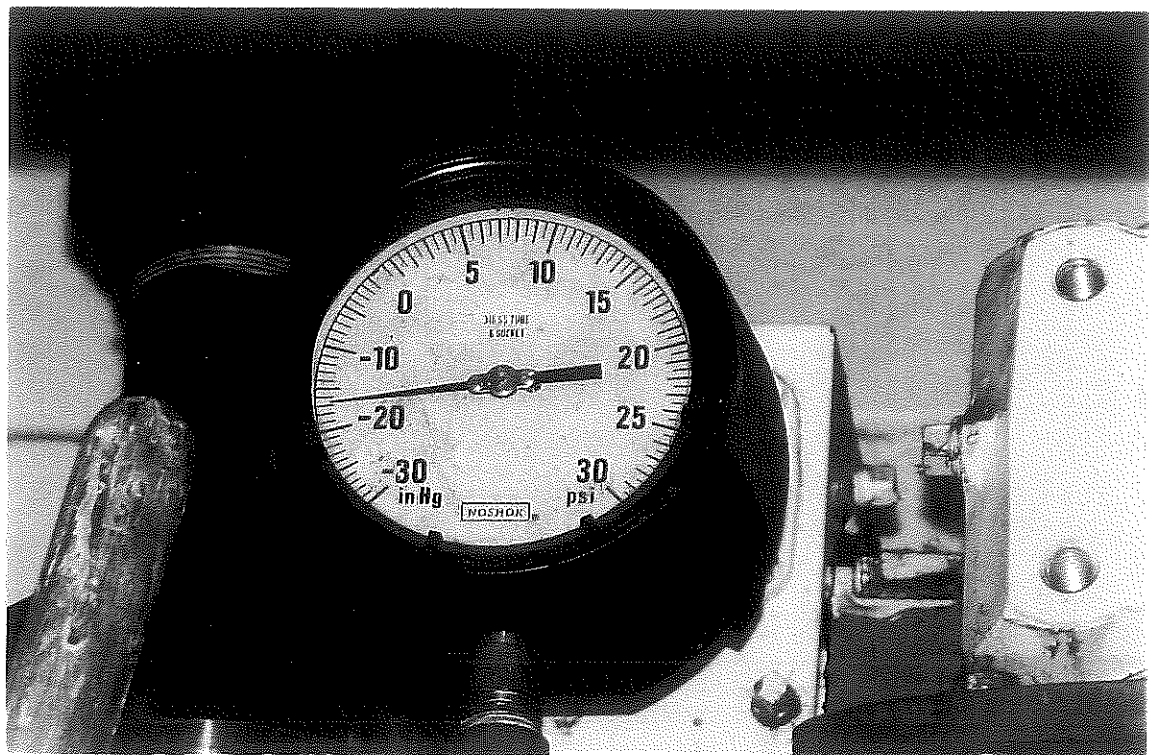
401 Lincoln Way West ■ Osceola, IN 46561
Phone: 574-674-0161 ■ Fax: 574-674-2778
Cell Phone: 574-220-5603
E-mail: misrcs@sbcglobal.net

EXHIBIT A

DISTILLATION SYSTEM



VIEW OF SOLVENT RECOVER SYSTEM DISTILLATION UNIT



VACUUM PUMP GAUGE

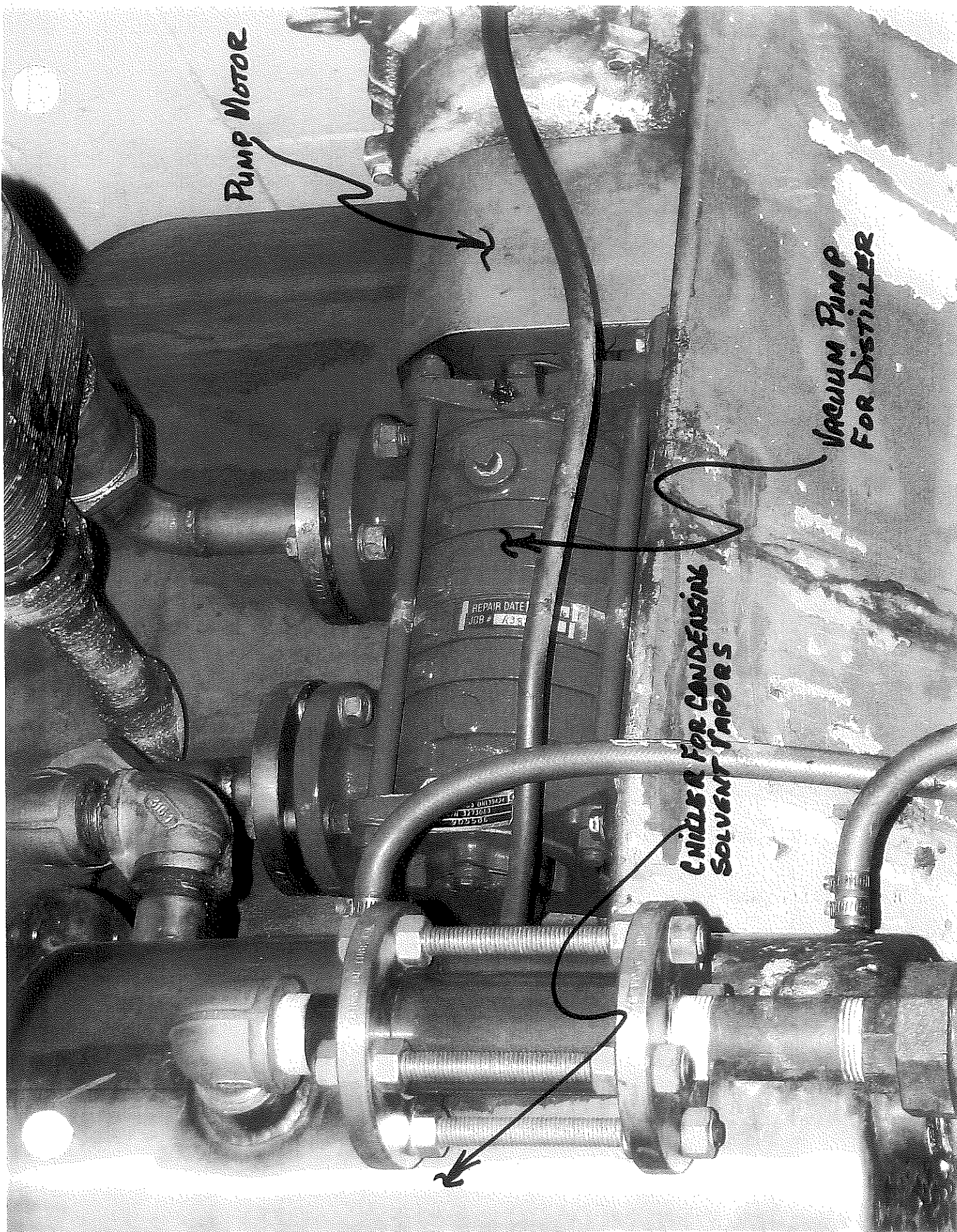
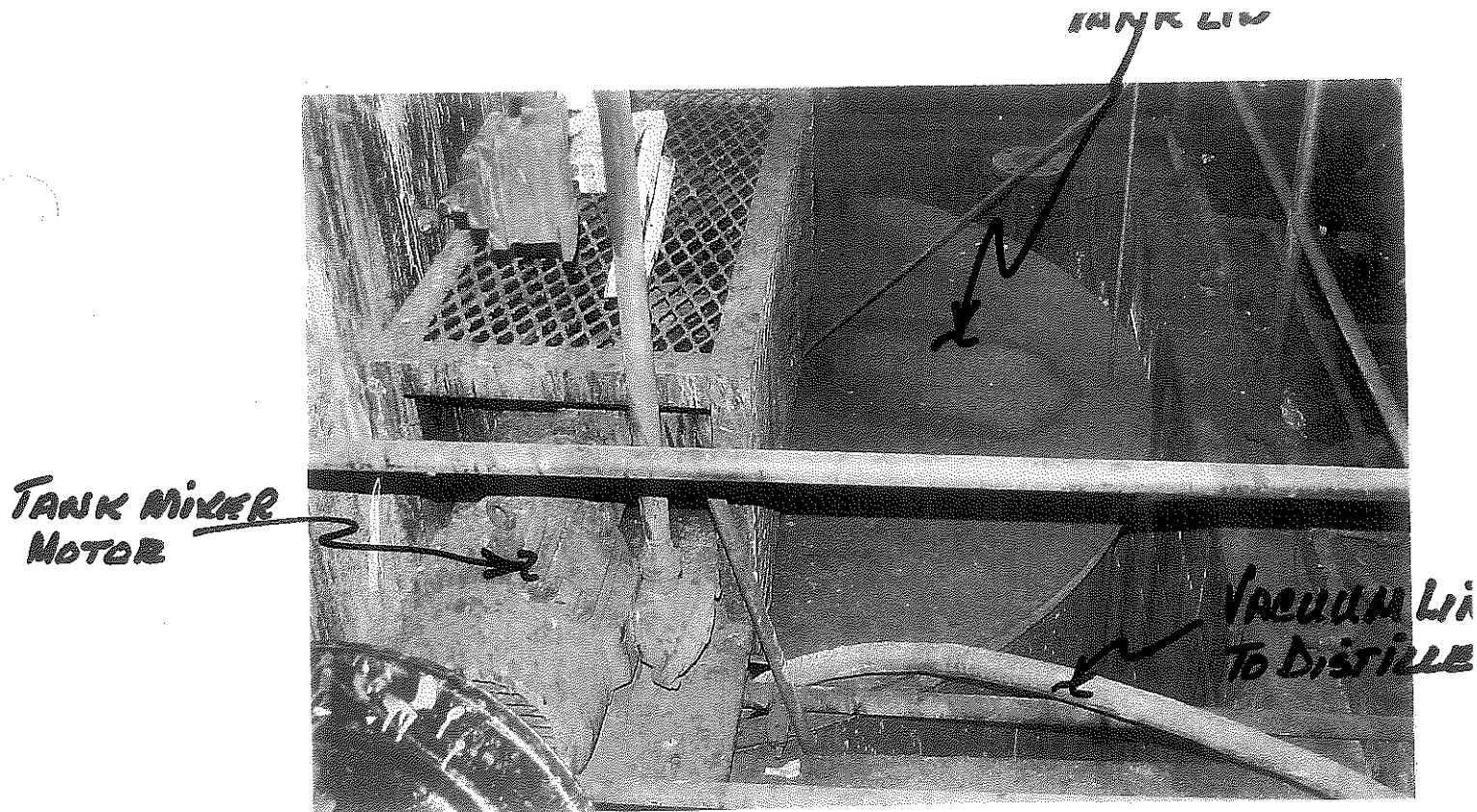


PHOTO OF DISTILLER VACUUM PUMP, MOTOR & CHILLER



TANK LID (CLOSED), FLEXIBLE VACUUM LINE & MIXING MOTOR



FRONT SIDE OF TANK WHERE USED SOLVENT IS POURED INTO TANK

EXHIBIT B

NCP COATINGS AIR PERMIT

STATE OF MICHIGAN



JOHN ENGLER, Governor
DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48209-7373

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

REPLY TO:

AIR QUALITY DIVISION
PO BOX 30260
LANSING MI 48209-7760

October 1, 2001

Mr. M. Sheman Drew Jr.
NCP Coatings Inc.
225 Fort Street
Niles, Michigan 49120-0307

Dear Mr. Drew:

This letter is in reference to your Permit to Install application for the paint manufacturing facility located at 225 Fort Street, Niles, ~~Reed~~ Michigan. This application, identified as No. 285-00, has been evaluated and approved by the Air Quality Division, pursuant to the delegation of authority from the Michigan Department of Environmental Quality.

This approval is based upon and subject to compliance with all administrative rules of the Department and conditions stipulated in the attached supplement. Please review these conditions thoroughly so that you may take the actions necessary to ensure compliance with all of these conditions.

Also, Permit to Install No. 1003-89 has been voided because the equipment is now covered by Permit to Install No. 285-00.

Please contact me if you have any questions regarding this permit.

Sincerely,

Andrew Drury, Engineer
Chemical Process Unit
Permit Section
Air Quality Division
(517) 335-3107

AD:PK

Attachments

cc: Ms. Mary Douglas, District Supervisor
Mr. Terry Mors, TEAM Environmental Consulting, Inc.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR QUALITY DIVISION

AIR USE PERMIT APPLICATION

For authority to install, construct, reconstruct, relocate, modify, or alter process, fuel-burning or refuse burning equipment and/or control equipment (permits to install are required by administrative rules pursuant to section 5505 of act 481, p.a. 1984 as amended).

FOR DEQ USE ONLY
APPLICATION NUMBER

285-00

type or print clearly. Instructions are available on the Internet at <http://www.deq.state.mi.us/aeq/>, or call the Air Quality Division at 517-373-7023.

1. APPLICANT NAME: (Business License Name of Corporation, Partnership, Individual Owner, Government Agency) Niles Chemical Paint, Inc.		AIR QUALITY DIVISION	
2. APPLICANT ADDRESS: (Number and Street) 225 Fort Street		AIR QUALITY DIVISION	
CITY: (City or Village) Niles	STATE: MI	ZIP CODE: 49120	PERMIT SECTION
3. EQUIPMENT OR PROCESS LOCATION: (Number and Street) (if different than item 2)		COUNTY: Berrien	
CITY: (City or Village)		ZIP CODE:	
4. GENERAL NATURE OF BUSINESS: Manufacture of commercial and industrial coatings and associated resins.			
5. EQUIPMENT OR PROCESS DESCRIPTION: A Description MUST Be Provided Here. (Attach additional sheets, if necessary. Include Source Classification Codes (SCCs).) NCP manufactures specialty coatings for government and industrial customers. As part of the paint manufacturing process, this facility manufactures some resins for use in its own coatings. The facility has been in operation since 1948, with much of its equipment grandfathered from operating permit requirements. This permit application is intended to re-permit the facility, and establish flexible groups for the paint manufacturing, resin manufacturing, and support services processes.			
JULY CODES:			
STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE: 2851		STATE REGISTRATION (EMISSION INVENTORY) NO.: N2352	
7. ACTION AND TIMING: (Enter dates for those which INSTALLATION, CONSTRUCTION, RECONSTRUCTION OR ALTERATION:		ESTIMATED STARTING DATE	
RELOCATION:		ESTIMATED COMPLETION DATE	
CHANGE OF OWNERSHIP:			
8. NAME OF PRIOR OWNER, IF ANY:		PRIOR AIR USE PERMIT NUMBER, IF ANY:	
9. AUTHORIZED FIRM MEMBER CERTIFICATION:			
PRINTED OR TYPED NAME: Michael Lichtowich		TITLE: VP Environmental	
SIGNATURE: 		PHONE NUMBER: (Include Area Code) 616-683-3377	
		DATE: 8-8-00	
10. CONTACT PERSON NAME: (if different than name in item 9) Terry A. Mors		PHONE NUMBER: (Include Area Code) 734-426-0983	
11. DISPOSITION OF APPLICATION: (FOR DEQ USE ONLY - DO NOT WRITE BELOW THIS LINE)			
DATE OF RECEIPT (OF ALL INFORMATION REQUIRED BY RULE 203): 9-7-01			
DATE PERMIT TO INSTALL APPROVED: 10-1-01		SIGNATURE: 	
APPLICATION / PERMIT VOIDED:		SIGNATURE:	
APPLICATION / PERMIT DENIED:		SIGNATURE:	
*SUBJECT TO COMPLIANCE WITH ALL DEPARTMENT RULES AND THE CONDITIONS STIPULATED IN THE ATTACHED SUPPLEMENT.			

SUPPLEMENT to PERMIT No. 285-00

**NCP Coatings, Inc.
Niles, Michigan**

October 1, 2001

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. [R 336.1201(1)]
2. If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install. [R 336.1201(4)]
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. [R 336.1201(6)(b)]
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. [R 336.1201(8), Section 5510 of Act 451, PA 1994]
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. [R 336.1219]
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. [R 336.1901]
7. The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this

rule, to the District Supervisor, Air Quality Division. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within ten days, with the information required in this rule. [R 336.1912]

8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 of the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, PA 1994, and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. [R 336.1301]
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this permit to install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). [R 336.1370]
13. Except as allowed by Rule 285 (a), (b), and (c), applicant shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. [R 336.1201(1)]
14. The Department may require the applicant to conduct acceptable performance tests, at the applicant's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. [R 336.2001]

SPECIAL CONDITIONS
 October 1, 2001

Emission Unit Identification

Emission Unit	Emission Unit Description	Stack ID	Section
EUPAINT	Paint manufacturing including mills, dispersers, portable and stationary mixing tanks, mixers, and container filling.	-	1
EURESIN	Resin manufacturing including resin kettles, thin down tanks, filters, and storage tanks.	SVKETTLE SVTHIN	2
EUTOTECLEAN	Tote cleaner.	-	3
EUTOTEREFURB	Tote refurbishing activities, including tote painting.	SVREFURB	3
EURECLAIM	Solvent reclamation unit.	-	3
EUEXEMPT	Exempt equipment including cold cleaners, QA/QC laboratory, research and development, storage tanks.	-	4
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1276 to R336.1290.			

Flexible Group Identification

Flexible Group	Emission Units Included in Flexible Group	Section
FGSUPPORT	EUTOTECLEAN, EUTOTEREFURB, and EURECLAIM	3
FGFACILITY	EUPAINT, EURESIN, EUEXEMPT, and FGSUPPORT	4

Section 1 - EUPAINT

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements
1.1.	VOC	EUPAINT	18 tons per year	12-month rolling time period as determined at the end of each calendar month	Special Condition Nos. 1.4, 1.6, 1.7, 1.8, 1.10, 1.11, 1.12, and 1.13	R336.1205(3) R336.1702(a)
1.2.	Particulate	EUPAINT	0.01 pound per 1,000 pounds of exhaust gases	NA	Special Condition Nos. 1.3 and 1.9	R336.1331

Visible Emission Limits

- 1.3. Visible emissions from EUPAINT shall not exceed a 6-minute average of 5% opacity.
 [R336.1301]

Material Usage Limits

- 1.4. The permittee shall not produce more than 2,000,000 gallons of coating in EUPAINT per 12 month rolling time period as determined at the end of each calendar month. [R336.1205(3), R336.1702(a)]
- 1.5. The triethylamine content of any coating shall not exceed 5 percent by volume. [R336.1225, R336.1901]

Process/Operational Limits

- 1.6. The permittee shall equip all mixing tanks, mills, and dispersers with covers that reduce the air flow across the equipment and completely cover the equipment opening, except for openings which are no larger than necessary to allow safe clearance for the mixer shaft, etc. The openings shall be covered at all times except when operator access is necessary. In addition, all solvent containers shall be closed when not in use. [R336.1205(3), R336.1225, R336.1702(a)]
- 1.7. The permittee shall immediately clean up all spills involving VOCs and volatile HAPs. Clean up shall be conducted in a manner that minimizes VOC and HAP emissions to the air. [R336.1205(3), R336.1225, R336.1702(a)]
- 1.8. The permittee shall keep all VOC and volatile HAP contaminated rags, gloves, sawdust, etc., in closed containers and shall dispose of these materials in a manner that minimizes VOC and HAP emissions to the air. [R336.1205(3), R336.1225, R336.1702(a)]

Equipment

- 1.9. The permittee shall not charge solids to any equipment normally controlled by a dust collector unless the dust collector is installed and operating properly in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1301, R336.1331]

Recordkeeping

	Record	Applicable Requirements
1.10.	Monthly and 12-month rolling time period amount, in gallons, of each product produced and the total for all products.	R336.1205(3) R336.1702(a)
1.11.	Monthly and 12-month rolling time period number of batches produced and the size and cleaning frequency of the equipment.	R336.1205(3) R336.1702(a)
1.12.	The formulation of each product produced including the VOC, individual HAP, and total HAP contents.	R336.1205(3), R336.1225, R336.1702(a), R336.1901
1.13.	Calculations of the monthly and 12-month rolling time period VOC emission rates using the production, cleaning, and formulation records.	R336.1205(3) R336.1702(a)
These records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request.		

Stack/Vent Restrictions

- 1.14. The exhaust gases from the EUPAINT shall be discharged unobstructed vertically upwards to the ambient air from stacks with maximum diameters of 12 inches at exit points not less than 22 feet above ground level. [R336.1225, R336.1901]

Section 2 – EURESIN

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements
2.1.	VOC	EURESIN	10 tons per year	12-month rolling time period as determined at the end of each calendar month	Special Condition Nos. 2.5, 2.8, 2.9, 2.12, 2.13, 2.14, 2.15, and 2.16	R336.1205(3) R336.1702(a)
2.2.	Particulate	EURESIN	0.01 pound per 1,000 pounds of exhaust gases	NA	Special Condition Nos. 2.3, 2.4, 2.6, 2.7, 2.10, 2.11, and 2.17	R336.1331

Visible Emission Limits

- 2.3. Visible emissions from EURESIN, except during addition of phthalic anhydride, shall not exceed a 6-minute average of 5% opacity. [R336.1301]
- 2.4. Visible emissions from EURESIN, during addition of phthalic anhydride, shall not exceed a 6-minute average of 20% opacity except as allowed by Rule 301. [R336.1301]

Material Usage Limits

- 2.5. The permittee shall not produce more than 651,000 gallons of resin in EURESIN per 12 month rolling time period as determined at the end of each calendar month. [R336.1205(3), R336.1702(a)]

Equipment

- 2.6. The permittee shall not operate a resin kettle, except the research and development kettle, unless the scrubber is installed, maintained, and operating properly in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1301, R336.1331]
- 2.7. The permittee shall equip and maintain the scrubber with a pressure drop indicator and a liquid flow indicator. [R336.1205(3), R336.1301, R336.1331, R336.1910]
- 2.8. The permittee shall not operate a thin down tank unless the condenser is installed, maintained, and operating properly in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1225, R336.1702(a), R336.1901]

- 2.9. The permittee shall equip and maintain the condenser with an exhaust gas temperature monitor. [R336.1205(3), R336.1225, R336.1702(a), R336.1901, R336.1910]

Monitoring

- 2.10. The permittee shall monitor the pressure drop across the scrubber in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1301, R336.1331, R336.1910]
- 2.11. The permittee shall monitor the liquid flow rate of the scrubber in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1301, R336.1331, R336.1910]
- 2.12. The permittee shall monitor the exhaust gas temperature of the condenser in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1225, R336.1702(a), R336.1901, R336.1910]

Recordkeeping

	Record	Applicable Requirements
2.13.	Monthly, and 12-month rolling time period amount, in gallons, of each product produced and the total for all products.	R336.1205(3) R336.1702(a)
2.14.	Monthly, and 12-month rolling time period wash solvent usage rate, in gallons.	R336.1205(3) R336.1702(a)
2.15.	The formulation of each product produced, including the VOC, individual HAP, and total HAP contents.	R336.1205(3), R336.1225, R336.1702(a), R336.1901
2.16.	Calculations of the monthly and 12-month rolling time period VOC emission rates using the production and formulation records.	R336.1205(3) R336.1702(a)
2.17.	Record of the pressure drop across the scrubber, liquid flow rate of the scrubber, and the exhaust gas temperature of the condenser in accordance with the operation and maintenance plan maintained on site.	R336.1205(3), R336.1225, R336.1301, R336.1331, R336.1702(a), R336.1901
These records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request.		

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirements
2.18.	SVKETTLE	24	40	R336.1225, R336.1901
2.19.	SVTHIN	3	33	R336.1225, R336.1901
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

Section 3 - FGSUPPORT

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements
3.1.	VOC	FGSUPPORT	7 tons per year	12-month rolling time period as determined at the end of each calendar month	Special Condition Nos. 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, and 3.10.	R336.1205(3) R336.1702(a)

Material Usage Limits

- 3.2. The permittee shall not use more than 24,000 gallons of cleaning solvent in EUTOTECLEAN per 12 month rolling time period as determined at the end of each calendar month. [R336.1205(3), R336.1702(a)]
- 3.3. The permittee shall not use more than 1,400 gallons of coating in EUTOTEREFURB per 12 month rolling time period as determined at the end of each calendar month. [R336.1205(3), R336.1702(a)]
- 3.4. The permittee shall not process more than 150,000 gallons of wash solvent in EURECLAIM per 12 month rolling time period as determined at the end of each calendar month. [R336.1205(3), R336.1702(a)]

Process/Operational Limits

- 3.5. The permittee shall not operate EUTOTECLEAN unless the cover is closed and sealed in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1225, R336.1702(a), R336.1901]

Equipment

- 3.6. The permittee shall equip and maintain EUTOTECLEAN with a "lid secure sensor" interlock that prevents operation if the cover is not properly closed. [R336.1205(3), R336.1225, R336.1702(a), R336.1901, R336.1910]
- 3.7. The permittee shall not operate EUTOTEREFURB unless the overspray filter is installed, maintained, and operating properly in accordance with the operation and maintenance plan maintained on site. [R336.1205(3), R336.1301, R336.1331]

Recordkeeping

	Record	Applicable Requirements
3.8.	Monthly and 12-month rolling time period cleaning solvent usage, coating usage, wash solvent processing rates, in gallons.	R336.1205(3), R336.1702(a)
3.9.	The composition of each cleaning solvent, coating, and wash solvent, including the VOC, individual HAP, and total HAP contents.	R336.1205(3), R336.1225, R336.1702(a), R336.1901
3.10.	Calculations of the monthly and 12-month rolling time period VOC emission rates using the material usage and composition records.	R336.1205(3) R336.1702(a)
These records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request.		

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirements
3.11.	SVREFURB	6	6	R336.1225, R336.1901

Section 4 - FGFACILITY

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements
4.1.	VOC	Stationary Source	40 tons per year	12-month rolling time period as determined at the end of each calendar month	Special Condition Nos. 1.1, 2.1, 3.1, 4.5, and 4.8	R336.1205(3) R336.1702(a)
4.2.	Each HAP ¹	Stationary Source	Less than 9 tons per year	12-month rolling time period as determined at the end of each calendar month	Special Condition Nos. 1.1, 2.1, 3.1, 4.5, and 4.8	R336.1205(3)
4.3.	Total HAPs	Stationary Source	Less than 22 tons per year	12-month rolling time period as determined at the end of each calendar month	Special Condition Nos. 1.1, 2.1, 3.1, 4.5, and 4.8	R336.1205(3)

¹ Hazardous air pollutant, as defined pursuant to Section 112(b) of the Clean Air Act.

Recordkeeping

- 4.4. The permittee shall keep a separate written record for each emission unit of all equipment installations and modifications made to each emission unit. These records shall be kept on file for the life of the equipment and made available to the Department upon request. [R336.1201]
- 4.5. The permittee shall keep a separate written record of the monthly and 12-month rolling time period VOC, individual HAP, and total HAP emission rates from the stationary source. These records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3), R336.1702(a)]
- 4.6. The permittee shall develop, implement, and maintain an approvable operation and maintenance plan for the facility. The plan shall include operating and monitoring parameters and maintenance requirements for air pollution control equipment to ensure the equipment performs properly. [R336.1205(3), R336.1225, R336.1301, R336.1331, R336.1702(a), R336.1901]

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
PERMIT EVALUATION FORM

10/01/01

APPLICATION NO. YR.Suf.Sup# 285 00 0 Fmt ID No. 23174 Permit_Rvwr A. DRURY
APPLICANT NAME NCP COATINGS INC Site_Rvwr
State Reg. No. N2352 (New No. request date) / /

Site Owner: NCP COATINGS INC
Location of Source:
225 FORT STREET
NILES MI 49120

Co. Contact (616) 683-3377
MICHAEL LICHATOWICH
NCP COATINGS INC
225 FORT STREET
NILES MI 49120

County BERRIEN County No.11 District 4 Temp Site F Soil Remed F

Site Comments:

REASON FOR APPLICATION FACILITY WIDE PERMIT

INSTALLATION DATE: PROCESS EQUIPMENT / / CONTROL EQUIPMENT / /
RELATED PERMIT(S) 1003-89 VOIDS 1003-89

POLLUTANTS NETTED OUT FROM PSD REVIEW

STATE/FED. AIR REG'S SOURCE IS SUBJECT TO? NSPS F, NESHAPS F, PSD F, Act 64 F
SIP Rule No.(s) 205,301,331,702,910 Other 225, 901

OPT-OUT? T ENFORCEMENT? F

EPA NOTIFICATION REQUIRED? F DATE INFO SENT TO EPA? / /

OFFSETS PROVIDED? F IF YES, HOW MUCH AND FROM WHERE?

Al_recvd 08/23/00 Log_date 08/29/00 Screened 08/28/00 Adm_Cmplt / /
Assigned 08/29/00 TecDetrmn 08/15/00 Tec_Cmplt 09/07/01 Site_Aprvd / /
PTI_Aprvd / / PTI_Denied / / PTI_Void / /
Total_days 0 Complete_days 0 Eval_days 0
Pmt_ToTox / / Pmt_FrTox / / PmtToMod / / PmtFrMod / /
Add_Inf01 10/20/00 Co_Rspons1 03/19/01 Add_Info2 04/06/01 Co_Rspons2 09/07/01
Draft_Pmt 09/13/01 Co_Accept 09/14/01 Scr_Letter / / To_Dist / /

Reviewed By: *Andrew J. Dwyer*

Date: 10-1-01

Approved By: *Andrew J. Dwyer*

Date: 10-1-01

PERMIT NO. YR.Suf.Sup#
285 00 0

PERMIT No. Yr.Suf.Sup.
285 00 0

ESTAB No.
N2352

10/01/01

DESCRIPTION OF SOURCE & RELATED CONTROL EQUIP./TECHNOLOGY

The source is a paint manufacturing facility consisting of the following emission units and controls:

EUPAINT - Paint manufacturing which includes mills, dispersers, portable and stationary mixing tanks, mixers, and container filling. Volatile emissions are controlled by covers on mixing tanks, mills, and dispersers as well as good housekeeping (cleaning up spills, keeping VOC laden rags, etc., covered). Particulate emissions are controlled by equipment covers and dust collectors.

EURESIN - Resin manufacturing which includes resin kettles, thin down tanks, filters, and storage tanks. Resin cooking emissions are controlled by a water scrubber and thin down emissions are controlled by a condenser.

EUTOTECLEAN - Tote cleaning machine. Emissions are controlled by the cover, which must be in place for the machine to operate.

EUTOTEREFURB - Tote refurbishing activities, including tote painting. Particulate emissions from painting are controlled by overspray filters.

EURECLAIM - Solvent reclamation unit for reclaiming used cleaning solvent. There is no add on control, but the unit's condenser minimizes emissions.

Flexible groups:

FGSUPPORT - EUTOTECLEAN, EUTOTEREFURB, EURECLAIM

FGFACILITY - Entire facility.

The following SCCs apply:

- 3-01-014-01 for paint manufacturing
- 3-01-014-98 other (solvent reclamation)
- 3-01-018-38 for resin kettles
- 3-01-018-39 for resin thin down

DESCRIPTION OF ANY REQUIRED MONITORING: (CEMS, PROCESS, CONTROL EQUIP.)

EUPAINT

1. Monthly and 12-month rolling time period amount, in gallons, of each product produced and the total for all products.
2. Monthly and 12-month rolling time period number of batches produced and the size and cleaning frequency of the equipment.
3. The formulation of each product produced including the VOC, individual HAP, and total HAP contents.
4. Calculations of the monthly and 12-month rolling time period VOC emission rates using the production, cleaning, and formulation records.

EURESIN

1. Monthly and 12-month rolling time period amount, in gallons, of each product produced and the total for all products.
2. Monthly and 12-month rolling time period wash solvent usage rate, in gallons.
3. The formulation of each product produced, including the VOC, individual HAP, and total HAP contents.
4. Calculations of the monthly and 12-month rolling time period VOC emission rates using the production and formulation records.
5. Monitoring and recording of the pressure drop across the scrubber, liquid flow rate of the scrubber, and the exhaust gas temperature of the condenser in accordance with the operation and maintenance plan maintained on site.

REPORT

1. Monthly and 12-month rolling time period cleaning solvent usage, coating usage, wash solvent processing rates, in gallons.
2. The composition of each cleaning solvent, coating, and wash solvent, including the VOC, individual HAP, and total HAP contents.
3. Calculations of the monthly and 12-month rolling time period VOC emission rates using the material usage and composition records.

FGFACILITY

1. Record for each emission unit of all equipment installations and modifications made to each emission unit.
2. Separate written record of the monthly and 12-month rolling time period VOC, individual HAP, and total HAP emission rates from the stationary source.

CONTROL EQUIPMENT BYPASS, IF ANY, & REASON WHEN BYPASS OCCURS:

N/A

PROCESS/CONTROL WASTE AND DISPOSAL

All waste will be properly disposed of. Solvent reclaim unit still bottoms is used in a product. Clean up solvent is either used in products or reclaimed.

GENERAL COMMENTS

The permittee requested a permit to cover the entire facility, in part to be a synthetic minor source and to facilitate future changes through a flexible permit. The permittee will be allowed to make changes to the various emission units as long as they meet the requirements of the exemptions, specifically Rule 285 which allows changes that don't constitute installation, construction, or reconstruction of an emission unit. By grouping the equipment into fairly large emission units, especially the paint manufacturing portion, the permittee will be able to make a lot of equipment and product changes without having to get a new permit.

******* EUPAINT**

The paint manufacturing operations are all grouped into the EUPAINT emission unit for flexibility. The permittee manufactures three families of coatings: military (primarily U.S. Navy), tree marking paint, and industrial coatings for commercial customers. NCP manufactures specialty coatings and therefore must have flexibility to manufacture new products and, on occasion, install new equipment. Past production has been about 1 million gallons; NCP is requesting a production limit of 2 million gallons.

The first step in the paint process is mixing the dry raw materials with resins and wetting agents. The VOC emissions are low at this stage and the majority of the particulate emissions are controlled by dust collectors. This mixing is done in high-speed dispersers and various types of mills, which are closed and therefore have very low emissions during operation.

The paste is then transferred in portable tanks to mixing tanks (portable or stationary, depending on batch size) where solvent, other liquids, and other dry raw materials are added to produce the desired product. The mixing tanks are kept closed, except for openings required for mixer shafts and addition of raw materials, to minimize emissions.

The product is then "filled" into whatever size product container is desired. There are VOC emissions associated with displacement from the container being filled.

The equipment is cleaned using cleaning solvent (mix of various solvents recovered from solvent recovery still). The primary emissions are due to cleaning the equipment. In most cases, the cleaning solvent is incorporated into the next batch of product to minimize waste and emissions.

No add on control is proposed for paint manufacturing VOC emissions due to the relatively low emission rate and the numerous pieces of equipment from which the emissions occur. Keeping the various pieces of equipment closed or covered should be sufficient to reduce VOC emissions. It is also in the permittee's best interest to minimize VOC evaporation in order to maintain product quality. Keeping the equipment closed/covered will also help keep dust, etc., from contaminating the paint.

EMISSIONS

The permittee estimated the emissions based on the amount of paint produced.

For VOC, NCP assumed an emission factor of 1% of the paint produced, which appears to predict higher emissions than the EPA factor of 0.034 lb VOC per lb solvent, likely due to the amount of water based paint produced. VOC emissions were estimated to be 17.4 tons per year.

Particulate emissions were estimated using a factor of 0.5 lb per ton of paint produced, for a total of 2 tons of PM emissions.

The permittee estimated the individual toxic air contaminant emission rates based on the estimated annual emissions and the relative usage rate of each compound.

I estimated the TAC emission rates on the maximum estimated VOC emission rate (10.69 lb/hour) and the relative usage rate of each compound, resulting in significantly higher emission rates than the permittee.

MODELING

The emissions from paint production were modeled using SCREEN3, assuming all emissions come from a single stack. In reality, there are many stacks, so this approach should be conservative. In addition, the SCREEN3 model is conservative.

The modeling results showed that most TACs meet their screening levels at the maximum VOC emission rate while most of the others meet their screening levels at emission rates well above their expected emission rates. However, triethylamine meets its screening level at a relatively low emission rate. Therefore, its percent composition in any product is limited to 5% by volume (much higher than actually used) to restrict its emission rate.

CONTROL

For VOC, the permit requires equipment to be covered and spills to be immediately cleaned up; there is no add on control.

For particulate emissions, dust collectors are required on the largest sources of PM emissions.

***** EURESIN

Resin is a critical component of paint. NCP produces some of its own resin and purchases the rest. Past production has been about 100,000 gallons per year; NCP requested a production limit of 651,000 gallons per year, which is the amount of resin needed to produce 2 million gallons of paint.

Resin is produced by "cooking" various raw materials in a kettle. Emissions from the cooking stage from the large and medium kettles are controlled by a

water scrubber. Emissions from the small research and development kettle are controlled.

The concentrated resin produced in the kettles is then transferred to a thin down tank and mixed with solvent. Emissions from the thin down tank are controlled by a water cooled scrubber.

EMISSIONS

Engineering calculations were used to estimate the emissions from resin production based on the highest VOC resin and 651,000 gallons produced; details are in the file. The permittee estimated 10.04 tons per year VOC and 0.2 tons per year of particulate.

Opacity is limited to 5%, except during addition of phthalic anhydride when opacity is limited to 20%. The permittee has observed opacity at times during the addition of phthalic anhydride, but during a visit to the site, no opacity was observed.

The individual toxic air contaminant emission rates were estimated using engineering calculations. The permittee used the highest rate from an individual process step in the modeling while I used the total rate for all of the process steps to be conservative.

MODELING

The emissions from resin production were modeled using SCREEN3, assuming all emissions exhaust through the scrubber stack. In reality, there are two stacks (scrubber and condenser), so this approach should be conservative. In addition, the SCREEN3 model is conservative.

The results showed that the emissions meet the screening levels at the highest expected emission rates, so Rule 225 is met. The actual emissions should be much lower than the rates modeled.

CONTROL

Emissions from the kettles (except R&D) are controlled by the scrubber while emissions from thin down are controlled by a condenser.

***** PGSUPPORT

The support operations consist of the solvent reclamation unit, the tote/tank washer, and the tote repainting operation.

SOLVENT RECLAMATION

The solvent reclamation unit takes used wash solvent and recovers it using a wiped film evaporator. The recovered solvent is either used as a raw material or as cleaning solvent. Solids from the evaporator are used in a paint product. The solvent reclamation unit's condenser provides adequate control but is not required in the conditions since it is an essential part of the equipment.

TOTE CLEANER

The tote/tank cleaner uses wash solvent to clean the inside of the tanks. It is equipped with a cover, so the only emissions result from the solvent vapor left in the tank after washing. The cleaner will not operate if the cover is not closed.

TOTE PAINTING

Tote repainting consists of a single spray booth used to paint the portable t

EMISSIONS

Emissions from the various emission units were estimated using engineering calculations. See file for details. VOC emissions were estimated to be 6.7 () per year.

MODELING

The emissions from support services were modeled as if emitted from the tote painting operation, using SCREEN3. Emissions from solvent recovery and tote cleaning are fugitive. The results indicate the toxic air contaminant emissions will comply with Rule 225. The predicted ambient impacts are well below the screening levels.

PERMIT LIMITS

The permit limits the usage rate of cleaning solvent in the tote cleaner, coating for tote painting, and the amount of solvent processed in the solvent reclamation unit.

***** PGFACILITY

The facility wide permit requirements are:

1. Site wide VOC, individual HAP and total HAP limits and associated recordkeeping to establish the facility as a synthetic minor source.
2. Records are required for each emission unit of all equipment modifications and installations in order to demonstrate compliance with Rule 201 through the various exemptions, particularly 285 (a), (b), and (c).
3. An approvable operation and maintenance plan for the facility must be developed, implemented, and maintained and shall include operating, monitoring, and maintenance requirements for air pollution control equipment to ensure proper operation.

BASIS FOR RECOMMENDATION:

Recommend approval.

PERMIT No. Yr.Suf.Sup.
285 00 0

ESTAB No.
N2352

10/01/01

EMISSIONS FROM EQUIPMENT COVERED BY THIS PERMIT

Pol. Codes	Expected		Allowable		Limits
	PPH	TPY	PPH	TPY	
PM10	0.000	0.000	0.000	0.000	
SO2	0.000	0.000	0.000	0.000	
CO	0.000	0.000	0.000	0.000	
NO2	0.000	0.000	0.000	0.000	
VOC	0.000	0.000	0.000	40.000	stationary source
HAP	0.000	0.000	0.000	9.000	stationary source (less than)
HAPS	0.000	0.000	0.000	22.000	stationary source (less than)

ATTAINMENT STATUS PM10 CO O3
 Attainment A A A P - Primary S - Secondary A - All Standards
 Non Attainment U - Unclassified * Close to Non Attainment

MAXIMUM ALLOWED OPERATING SCHEDULE

HR/DAY 24 HR/WK HR/MO DAYS/WK DAYS/MO DAYS/YR 365 WKS/YR

PERMIT No. Yr.Suf.Sup.
285 00 0

ESTAB No.
0

10/01/01

Equipment Description PAINT MANUFACTURING

SCC 1 3-01-014-01

SCC 2 - - - 0

SCC 3 - - - 0

Cont. Code 99

Cont. Code 0

Cont. Code 0

STACK INFORMATION

Good Engr. Practice

Stack Information

No.	Ht (ft)	Bldg Ln (ft)	Bldg Wd (ft)	Bldg Ht (ft)	Stack Ht (ft)	Total Ht (ft)	Act Bldg Ht (ft)	Lin Type	Diam or Dim (in)
	0.0	0.0	0.0	0.0	0.0	22.0	17.0		0.0

Stack Exit Info. Map Coordinates Plume

Vel (F/S)	Temp (F)	Flow (CFM)	Dir	Cap	Zone	Horizontal	Vertical	Ht (ft)
0.0	0.0	0.0	U	F				0.0

Equipment Description RESIN KETTLES

SCC 1 3-01-018-38

SCC 2 - - - 0

SCC 3 - - - 0

Cont. Code 2

Cont. Code 0

Cont. Code 0

STACK INFORMATION

Good Engr. Practice

Stack Information

No.	Ht (ft)	Bldg Ln (ft)	Bldg Wd (ft)	Bldg Ht (ft)	Stack Ht (ft)	Total Ht (ft)	Act Bldg Ht (ft)	Lin Type	Diam or Dim (in)
1	0.0	0.0	0.0	0.0	0.0	40.0	18.0		24.0

Stack Exit Info. Map Coordinates Plume

Vel (F/S)	Temp (F)	Flow (CFM)	Dir	Cap	Zone	Horizontal	Vertical	Ht (ft)
0.0	0.0	0.0	U	F				0.0

Equipment Description RESIN THIN DOWN

SCC 1 3-01-018-39

SCC 2 - - - 0

SCC 3 - - - 0

Cont. Code 72

Cont. Code 0

Cont. Code 0

STACK INFORMATION

Good Engr. Practice

Stack Information

No.	Ht (ft)	Bldg Ln (ft)	Bldg Wd (ft)	Bldg Ht (ft)	Stack Ht (ft)	Total Ht (ft)	Act Bldg Ht (ft)	Lin Type	Diam or Dim (in)
	0.0	0.0	0.0	0.0	0.0	33.0	18.0		3.0

Stack Exit Info. Map Coordinates Plume

Vel (F/S)	Temp (F)	Flow (CFM)	Dir	Cap	Zone	Horizontal	Vertical	Ht (ft)
0.0	0.0	0.0	U	F				0.0

PERMIT No. Yr.Suf.Sup.
285 00 0

ESTAB No.
0

10/01/01

Agreement on the Conditions.

DISTRICT: PERSON Dorothy Bohn
ENFORCEMENT: PERSON
APPLICANT: PERSON Terry Mors

DATE 09/17/01
DATE / /
DATE 09/14/01

COORDINATION REQUIRED:

(UNITS, DIVISIONS, AGENCIES, ETC.)

PERSON CONTACTED	DATE CONTACTED	REQ	RESPN DATE	COMMENTS
DISTRICT	/ /	/	/	
ENFORCEMENT	/ /	/	/	
MODELING	/ /	/	/	
STACK SAMPLE	/ /	/	/	
TOXICS	/ /	/	/	
WMD	/ /	/	/	
SWQ	/ /	/	/	
ERD	/ /	/	/	
LAW MNGT	/ /	/	/	
> SURVEY	/ /	/	/	
LAW ENFORCE	/ /	/	/	

PERMIT No. Yr. Suf. Sup.
285 00 0

ESTAB No.
0

10/01/01

BACT REVIEW INFORMATION

SIC Code 2851

Max Design Capacity Units
0.00

CAS No. 000020-00-0

Pollutant VOC'S

SCC 3-01-014-01

MACT F LAER F PSD BACT F 702 BACT T NESHAP F TBACT F NSPS F
Limit 18.000 Units ton/year Basis

Control Code #1 99 Code #2 0 Code #3 0

Efficiency
0.00 %

Control MISCELLANEOUS CONTROL DEVICE

Comments:

The closed nature of some equipment and covering other equipment is Rule 702(a) BACT for VOC for paint manufacturing.

BACT REVIEW INFORMATION

SIC Code 2851

Max Design Capacity Units
0.00

CAS No. 000020-00-0

Pollutant VOC'S

SCC 3-01-018-38

MACT F LAER F PSD BACT F 702 BACT T NESHAP F TBACT F NSPS F
Limit 10.000 Units ton/year Basis

Control Code #1 2 Code #2 0 Code #3 0

Efficiency
0.00 %

Control WET SCRUBBER - MEDIUM EFFICIENCY

Comments:

The wet scrubber is Rule 702(a) BACT for VOC for the resin kettles (other than the R&D kettle). Note the VOC limit is the total for resin production.

BACT REVIEW INFORMATION

SIC Code 2851

Max Design Capacity Units
0.00

CAS No. 000020-00-0

Pollutant VOC'S

SCC 3-01-018-39

MACT F LAER F PSD BACT F 702 BACT T NESHAP F TBACT F NSPS F
Limit 10.000 Units ton/year Basis

Control Code #1 72 Code #2 0 Code #3 0

Efficiency
0.00 %

Control TUBE AND SHELL CONDENSER

Comments:

The condenser is Rule 702(a) BACT for VOC for the resin thin down tank. Note the VOC limit is the total for resin production.

BACT REVIEW INFORMATION

SIC Code 2851

Max Design Capacity Units
0.00

CAS No. 000020-00-0

Pollutant VOC'S

SCC 3-01-014-70

MACT F LAER F PSD BACT F 702 BACT T NESHAP F TBACT F NSPS F

Limit 7.000 Units ton/year

Basis

Control Code #1 99 Code #2 0 Code #3 0
Control MISCELLANEOUS CONTROL DEVICE

Efficiency
0.00 %

Comments:

The tote cleaner lid, with an interlock to prevent cleaner operation without the lid, is Rule 702(a) BACT for VOC for the tote cleaner. Note the VOC limit is the total for the support services flexible group.